

General

Title

Sedation and analgesia: percentage of 6-hour periods of mechanical ventilation (MV) with monitoring of sedation.

Source(s)

Quality indicators in critically ill patients. Madrid (Spain): Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC); 2011. 185 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of 6-hour periods of mechanical ventilation (MV) with monitoring of sedation.

Rationale

The aim of intensive care medicine is to provide critical patients with the healthcare that they need, ensuring the quality and safety of care. Intensive care medicine is one of the principal components of modern healthcare systems. There is an increasing demand for this resource, which involves high costs.

The quality of care has gradually come to be the central focus of healthcare, and in recent years patient safety has come to represent one of the key aspects of quality. In the case of intensive care medicine, this interest in quality is even more evident, not only because of its social and economic impact, but also because some of the dimensions involved in the quality of care of critical patients take on greater importance: critical patients are more vulnerable, access to critical care is more limited so efforts to

distribute resources equitably are more important, scant scientific evidence is available, and the efficiency is limited.

Inappropriate sedation (both oversedation and undersedation) has adverse effects on mechanically ventilated patients, including prolongation of mechanical ventilation (MV) and hospital stays, as well as increased morbidity, mortality, and use of resources.

Validated sedation scales are useful in the management of MV patients, and their use is recommended in clinical guidelines.

Evidence for Rationale

Celis-Rodriguez E, Besso J, Birchenall C, de la Cal MA, Carrillo R, Castorena G, Ceraso D, Duenas C, Gil F, Jimenez E, Meza JC, Munoz M, Pacheco C, Palizas F, Pinilla D, Raffan F, Raimondi N, Rubiano S, Suarez M, Ugarte S, Federacion Panamericana e Iberica de Sociedades de Medicina Critica y Cuidados. [Clinical practice guideline based on the evidence for the management of sedoanalgesia in the critically ill adult patient]. Med Intensiva. 2007 Nov;31(8):428-71. [284 references] [PubMed](#)

Chamorro C, Martinez-Melgar JL, Barrientos R, Grupo de Trabajo de Analgesia y Sedacion de la SEMICYUC. [Monitoring of sedation]. Med Intensiva. 2008 Feb;32 Spec No:45-52. [104 references] [PubMed](#)

Estebanez-Montiel MB, Alonso-Fernandez MA, Sandiumenge A, Jimenez-Martin MJ, Grupo de Trabajo de Analgesia y Sedacion de la SEMICYUC. [Prolonged sedation in Intensive Care Units]. Med Intensiva. 2008 Feb;32 Spec No:19-30. [61 references] [PubMed](#)

Jacobi J, Fraser GL, Coursin DB, Riker RR, Fontaine D, Wittbrodt ET, Chalfin DB, Masica MF, Bjerke HS, Coplin WM, Crippen DW, Fuchs BD, Kelleher RM, Marik PE, Nasraway SA Jr, Murray MJ, Peruzzi WT, Lumb PD. Clinical practice guidelines for the sustained use of sedatives and analgesics in the critically ill adult. Crit Care Med. 2002 Jan;30(1):119-41. [235 references] [PubMed](#)

Pun BT, Dunn J. The sedation of critically ill adults: Part 1: Assessment. The first in a two-part series focuses on assessing sedated patients in the ICU. Am J Nurs. 2007 Jul;107(7):40-8; quiz 49. [39 references] [PubMed](#)

Quality indicators in critically ill patients. Madrid (Spain): Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC); 2011. 185 p.

Sessler CN, Pedram S. Protocolized and Target-based Sedation and Analgesia in the ICU. Crit Care Clin. 2009 Jul;25(3):489-513. [83 references] [PubMed](#)

Primary Health Components

Continuous sedation; analgesia; mechanical ventilation (MV); monitoring

Denominator Description

Number of 6-hour periods of mechanical ventilation (MV) with continuous sedation (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of 6-hour periods of mechanical ventilation (MV) with monitoring of sedation (see the related

"Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Intensive Care Units

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Institutionalization

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of 6-hour periods of mechanical ventilation (MV) with continuous sedation (days of MV and continuous sedation x 4)

Note:

Mechanical ventilation: Greater than 12 hours and continuous sedation.

Population: All 6-hour periods (or days x 4) in mechanically ventilated patients under continuous sedation during the period reviewed.

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of 6-hour periods of mechanical ventilation (MV) with monitoring of sedation

Note:

Monitoring: Evaluation of the level of sedation using one of the validated scales every 6 hours or when the clinical situation changes. Validated scales: Ramsay Sedation Scale, the Sedation Agitation Scale, the Motor Activity Assessment Scale, the Richmond Agitation-Sedation Scale (RASS), the Adaptation to the Intensive Care Environment (ATICE) instrument, and the Minnesota Sedation Assessment Tool (MSAT). There may be others.

Exclusions

Unspecified

Numerator Search Strategy

Institutionalization

Data Source

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Ramsay Sedation Scale; Sedation Agitation Scale; Motor Activity Assessment Scale; Richmond Agitation-Sedation Scale (RASS); Adaptation to the Intensive Care Environment (ATICE) instrument; Minnesota Sedation Assessment Tool (MSAT)

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Standard: 95%

Evidence for Prescriptive Standard

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Identifying Information

Original Title

Monitoring sedation.

Measure Collection Name

Measure Set Name

Sedation and Analgesia

Submitter

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

Developer

Spanish Society of Intensive and Critical Care and Units Coronary - Clinical Specialty Collaboration

Funding Source(s)

Boehringer Laboratories

Composition of the Group that Developed the Measure

Work Group for Sedation and Analgesia

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Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2011 Mar

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

2016 Jul

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in May 2016.

Measure Availability

Source available in [English](#) and [Spanish](#) from the Spanish Society of Intensive and Critical Care and Units Coronary (SEMICYUC) Web site.

For more information, contact SEMICYUC at Paseo de la Reina Cristina, 36, 4^o D, Madrid, Spain; Phone: +34-91-502-12-13; Fax: +34-91-502-12-14; Web site: www.semicyuc.org ; E-mail: secretaria@semicyuc.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on January 8, 2014. The information was verified by the measure developer on February 26, 2014.

The information was reaffirmed by the measure developer on May 10, 2016.

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Production

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